



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/973,453	10/09/2001	Jeffrey L. Stewart	177-043	5967

27771 7590 08/23/2005

LAW OFFICES OF JOHN DE LA ROSA
375 UPPER MOUNTAIN AVE
MONTCLAIR, NJ 07043

EXAMINER

WOZNIAK, JAMES S

ART UNIT	PAPER NUMBER
----------	--------------

2655

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/973,453	Applicant(s) STEWART ET AL.	
	Examiner James S. Wozniak	Art Unit 2655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 June 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 and 31-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 and 31-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. In response to the office action from 2/8/2005, the applicant has submitted an amendment, filed 6/8/2005, canceling claim 30, while arguing to traverse the art rejection based on the limitation regarding the display of a visual stimulus upon a fixation target being verbally identified (*Amendment, Page 7*). The applicant's arguments have been fully considered but are moot with respect to the new grounds of rejection in view of Sinclair et al (*U.S. Patent: 5,589,897*), Rorabaugh et al (*U.S. Patent: 5,035,500*), Kasha (*U.S. Patent: 5,737,060*), and Kasha (*U.S. Patent: 5,565,949*).
2. Due to the cancellation of claim 30, the examiner has withdrawn the previous claim objection drawn towards minor informalities.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1-5, 7-10, 26-29, 31-33, and 36-38** are rejected under 35 U.S.C. 103(a) as being unpatentable over Sinclair et al (*U.S. Patent: 5,589,897*) in view of Rorabaugh et al (*U.S. Patent: 5,035,500*).

With respect to **Claims 1 and 26**, Sinclair discloses:

Displaying to a subject a fixation target using a predetermined symbol (*target images on a screen of a monitor, Col. 5, Lines 26-52*);

Inputting the subject's verbal identification of a predetermined symbol (*Col. 6, Lines 1-3*);

Upon the subject correctly identifying the subject's field of vision utilizing the predetermined symbol, displaying a visual test stimulus to the subject at a predetermined location within the subject's field of vision (*Col. 5, Lines 45-65; Col.8, Line 11- Col. 9, Line 30*).

Although Sinclair teaches the verification of a field of vision through the use of a fixation target and the use of a speech recognition means in system interactions for a visual test stimulus (*Col. 5, Line 66- Col. 6, Line 17*), Sinclair does not specifically teach utilizing speech recognition to verify a field of vision through a fixation target, however Rorabaugh recites a means for verifying a visual field of a patient's eyes through the correct confirmation of displayed targets using speech recognition (*Col. 33, Line 60- Col. 35, Line 26*).

Sinclair and Rorabaugh are analogous art because they are from a similar field of endeavor in vision examination systems and procedures utilizing speech recognition. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Sinclair with the means for verifying a visual field of a patient's eyes as

Art Unit: 2655

taught by Rorabaugh in order to provide an enhanced and sophisticated means for easily recovering data from a test patient (*Rorabaugh, Col. 34, Line 49- Col. 35, Line 10*).

With respect to **Claims 2 and 27**, Sinclair further recites:

Evaluating the verbal identification of the visual test stimulus made by the subject using speech recognition (*Col. 5, Line 66- Col. 6, Line 17*).

With respect to **Claims 3**, Sinclair further discloses:

Repeatedly carrying out the steps of claim 1 for different predetermined symbols (*Col. 5, Lines 23-44*).

With respect to **Claims 4 and 29**, Sinclair recites:

Relocating the predetermined symbol to a new location (*Col. 5, Lines 23-44*).

With respect to **Claims 5 and 33**, Sinclair further discloses:

The fixation target is stationary (*Col. 5, Lines 23-44*).

With respect to **Claims 7 and 36**, Sinclair teaches displaying a visual stimulus upon determining eye fixation on a target (*Col. 5, Lines 45-65*), while Rorabaugh teaches the means for identifying a fixation target through speech recognition, as applied to Claim 1.

With respect to **Claims 8 and 37**, Sinclair discloses:

The predetermined symbol is a geometrical shape, letter, number, picture, or image that is readily identifiable by the subject (*star, cross, or "x," Col. 5, Lines 23-44*).

With respect to **Claims 9 and 31-32**, Sinclair discloses:

Recording whether the subject observes the visual test stimulus through speech recognition (*Col. 5, Line 66- Col. 6, Line 17*).

With respect to **Claims 10 and 38**, Sinclair recites:

Art Unit: 2655

Varying the size, shape, intensity, contrast, frequency, and/or color of the visual test stimulus (*size, Col. 5, Line 66- Col. 6, Line 17*).

With respect to **Claim 28**, Sinclair discloses:

Mean for changing the fixation target from said first symbol to a second symbol (*Col. 5, Lines 23-44*).

5. **Claims 6, 11-18, and 34-35** are rejected under 35 U.S.C. 103(a) as being unpatentable over Sinclair et al in view of Rorabaugh et al, and further in view of Kasha (*U.S. Patent: 5,737,060*).

With respect to **Claim 11**, Sinclair recites:

Displaying to a subject a fixation target using a predetermined symbol (*target images on a screen of a monitor, Col. 5, Lines 26-52*);

Inputting the subject's verbal identification of a predetermined symbol (*Col. 6, Lines 1-3*);

Upon the subject correctly identifying the subject's field of vision utilizing the predetermined symbol, displaying a visual test stimulus to the subject at a predetermined location within the subject's field of vision (*Col. 5, Lines 45-65; Col.8, Line 11- Col. 9, Line 30*).

Although Sinclair teaches the verification of a field of vision through the use of a fixation target and the use of a speech recognition means in system interactions for a visual test stimulus (*Col. 5, Line 66- Col. 6, Line 17*), Sinclair does not specifically teach utilizing speech recognition to verify a field of vision through a fixation target, however Rorabaugh recites a means for verifying a visual field of a patient's eyes through the correct confirmation of displayed targets using speech recognition (*Col. 33, Line 60- Col. 35, Line 26*).

Sinclair and Rorabaugh are analogous art because they are from a similar field of endeavor in vision examination systems and procedures utilizing speech recognition. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Sinclair with the means for verifying a visual field of a patient's eyes as taught by Rorabaugh in order to provide an enhanced and sophisticated means for easily recovering data from a test patient (*Rorabaugh, Col. 34, Line 49- Col. 35, Line 10*).

Although Sinclair in view of Rorabaugh teaches a method and system for identifying a fixation target using speech recognition for further display of a test stimulus, Sinclair in view of Rorabaugh does not specifically teach a method or system in which a fixation target is capable of moving and changing direction, wherein a patient responds to a target's change in direction, however Kasha discloses a visual field test in which a user responds to a moving fixation target's change in direction (*Col. 9, Lines 28-45; and Col. 6, Lines 8-24*).

Sinclair, Rorabaugh, and Kasha are analogous art because they are from a similar field of endeavor in vision analysis devices. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Sinclair in view of Rorabaugh with the moving fixation target taught by Kasha in order to implement a less fatiguing visual analysis test (*Kasha, Col. 1, Lines 51-59; and Col. 3, Lines 45-46*) that is more likely to maintain a patient's fixation (*Kasha, Col. 6, Lines 17-24*).

With respect to **Claims 6, 34, and 35**, Kasha teaches the means for moving a fixation target as applied to Claim 11.

Claim 12 contains subject matter similar to claim 2, and thus, is rejected for the same reasons.

Claim 13 contains subject matter similar to claim 3, and thus, is rejected for the same reasons.

Claim 14 contains subject matter similar to claim 4, and thus, is rejected for the same reasons.

Claim 15 contains subject matter similar to claim 7, and thus, is rejected for the same reasons.

Claim 16 contains subject matter similar to claim 8, and thus, is rejected for the same reasons.

Claim 17 contains subject matter similar to claim 9, and thus, is rejected for the same reasons.

Claim 18 contains subject matter similar to claim 10, and thus, is rejected for the same reasons.

6. **Claims 19-25** are rejected under 35 U.S.C. 103(a) as being unpatentable over Sinclair et al in view of Rorabaugh et al, and further in view of Kasha (*U.S. Patent: 5,565,949*).

With respect to **Claim 19**, Sinclair recites:

Displaying to a subject a fixation target using a predetermined symbol (*target images on a screen of a monitor, Col. 5, Lines 26-52*);

Inputting the subject's verbal identification of a predetermined symbol (*Col. 6, Lines 1-3*);

Upon the subject correctly identifying the subject's field of vision utilizing the predetermined symbol, displaying a visual test stimulus to the subject at a predetermined location within the subject's field of vision (*Col. 5, Lines 45-65; Col.8, Line 11- Col. 9, Line 30*).

Although Sinclair teaches the verification of a field of vision through the use of a fixation target and the use of a speech recognition means in system interactions for a visual test stimulus (*Col. 5, Line 66- Col. 6, Line 17*), Sinclair does not specifically teach utilizing speech recognition to verify a field of vision through a fixation target, however Rorabaugh recites a means for verifying a visual field of a patient's eyes through the correct confirmation of displayed targets using speech recognition (*Col. 33, Line 60- Col. 35, Line 26*).

Sinclair and Rorabaugh are analogous art because they are from a similar field of endeavor in vision examination systems and procedures utilizing speech recognition. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Sinclair with the means for verifying a visual field of a patient's eyes as taught by Rorabaugh in order to provide an enhanced and sophisticated means for easily recovering data from a test patient (*Rorabaugh, Col. 34, Line 49- Col. 35, Line 10*).

Although Sinclair in view of Rorabaugh teaches a method and system for identifying a fixation target using speech recognition for further display of a test stimulus, Sinclair in view of Rorabaugh does not specifically teach a method or system in which a fixation target is capable of changing appearance, wherein a patient responds to a target's change in appearance, however Kasha discloses a visual field test in which a user responds to a fixation target's change in shape (*Col. 4, Lines 25-37; and Col. 6, Lines 20-36*).

Sinclair, Rorabaugh, and Kasha are analogous art because they are from a similar field of endeavor in vision analysis devices. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Sinclair in view of Rorabaugh

with the shape changing fixation target taught by Kasha in order to implement a less fatiguing visual analysis test (*Kasha, Col. 8, Lines 3-9*).

Claim 20 contains subject matter similar to claim 2, and thus, is rejected for the same reasons.

Claim 21 contains subject matter similar to claim 4, and thus, is rejected for the same reasons.

Claims 22-25 contain subject matter similar to claims 7-10, respectively, and thus, are rejected for the same reasons.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Rebane (*U.S. Patent: 5,465,982*)- teaches a method for identifying a target pattern utilizing speech recognition.

Roenker (*U.S. Patent: 5,801,810*)- teaches a vision testing system utilizing a fixation image and speech recognition.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Wozniak whose telephone number is (571) 272-7632 and email is James.Wozniak@uspto.gov. The examiner can normally be reached on Mondays-Fridays, 8:30-4:30.

Art Unit: 2655

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached at (571) 272-7582. The fax/phone number for the Technology Center 2600 where this application is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the technology center receptionist whose telephone number is (703) 306-0377.

James S. Wozniak
8/17/2005

A handwritten signature in black ink, consisting of a series of connected loops and curves, representing the name W. R. Young.

W. R. YOUNG
PRIMARY EXAMINER